

IN THE CLAIMS:

Please cancel claims 1-18.

Please add the following new claims:

19. An intraluminal stent comprising:

an elongate tubular body formed of wire, said wire defining a plurality of waves arranged in longitudinally spaced windings along the length of said body, the winding being non-overlappingly spaced at a sufficiently small pitch so as to define a compact configuration.

20. An intraluminal stent of claim 33 wherein the waves of one winding are nested within the waves of the next adjacent winding.

21. An intraluminal stent of claim 19 wherein said wire include a single continuous, helically wound wire forming said windings.

22. An intraluminal stent of claim 19 further including a membrane covering supported by said tubular body.

23. An intraluminal stent of claim 19 wherein said tubular body is expandable.

24. An intraluminal stent of claim 19 wherein said spacings between said windings are uniform along the length of said tubular body.

25. An intraluminal stent of claim 19 wherein said spacing between said windings varies along the length of said tubular body.

26. An intraluminal stent comprising:

an elongate tubular wire-formed body, the wire forming said body being configured into a plurality of waves, each wave of said plurality having a wave peak and a pair of leg segments extending from said peak, said waves being arranged in spaced non-overlapping longitudinal succession such that the peak of one said waves is nested within the next adjacent longitudinally successive wave.

27. An intraluminal stent of claim 26 wherein said leg segments of each pair are of generally equal length.

28. An intraluminal stent of claim 26 wherein at least one wave includes leg segments of unequal length.

29. An intraluminal stent of claim 26 wherein each of said waves include leg segments of generally uniform unequal length.

30. An intraluminal stent of claim 28 wherein said plurality of waves are non-overlappingly spaced at a sufficiently small pitch so as to define a compact configuration.

31. An intraluminal stent of claim 26 wherein said tubular body includes plural wire windings formed into a wave-like pattern defining said waves, said windings being

32. An intraluminal stent of claim 26 wherein said winding are uniformly spaced apart.

33. An intraluminal stent of claim 26 wherein said wire windings are formed by a single continuous, helically wound wire.

34. An intraluminal stent comprising:

an elongate wire-formed tubular body, said wire-formed body defining a plurality of longitudinally adjacent spaced waves, said longitudinally adjacent spaced waves being non-overlappingly nested.

35. An intraluminal stent of claim 34 wherein said amplitude of said waves is generally uniform.

36. An intraluminal stent of claim 35 wherein said amplitude of said waves varies along the length of said tubular body.

37. An intraluminal stent of claim 36 wherein said amplitude of said waves at a central location of said tubular body is greater than said amplitude of the waves at the ends thereof.

38. An intraluminal stent comprising:

an elongate tubular body being formed of wire having a wave-like pattern defining a plurality of spaced apart successively formed waves along the length thereof, said successively formed waves being non-overlappingly longitudinally nested.

39. An intraluminal stent of claim 38 wherein said wave-like pattern is sinusoidal.

40. An intraluminal stent of claim 39 wherein said wave-like pattern is triangular.

41. An intraluminal stent of claim 38 wherein said wave-like pattern defines a plurality of continually repeating waves.

42. An intraluminal stent of claim 41 wherein said continually repeating waves are uniform.

43. An intraluminal stent of claim 41 wherein said continually repeating waves include at least one non-uniform wave.

44. A method of forming an intraluminal stent comprising the steps of:

forming a wire into a wave-like pattern, said pattern defining a plurality of wire waves;

and

arranging said formed wire so as to place said wire waves in spaced longitudinally nested succession forming a generally tubular body.

45. A method of claim 44 wherein said forming step includes forming a single wire to have a plurality of continuous wire waves.

46. A method of claim 45 wherein said arranging step includes:
helically winding said formed single wire.

47. A method of claim 46 wherein said helically winding step includes:
providing a cylindrical mandrel; and
helically winding said formed single wire about said mandrel.

48. A method of claim 45 wherein said forming step further includes:
providing a pair of gears having intermeshed teeth; and
moving said wire through said teeth of said gears so as to form said continuous wire waves.

49. A method of claim 45 wherein said forming step further includes:
forming said single wire to have a sinusoidal wave pattern.

50. A method of claim 45 wherein said forming step further includes:
forming said single wire to have a triangular wave pattern.

51. A method of claim 45 wherein said each wire wave defines a wave peak and a pair of leg segments extending from said peak.